

## STAFF REPORT

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**TO:** GALLATIN COUNTY COMMISSION

**FROM:** TOM ROGERS, PLANNER  
GALLATIN COUNTY PLANNING DEPARTMENT

**SUBJECT:** ZUELKE GRAVEL PIT CONDITIONAL USE PERMIT  
APPLICATION

**HEARING  
DATE:** JULY 28, 2009, 9:00 AM

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### DESCRIPTION / LOCATION:

**Spanish Peaks Engineering & Consulting, LLC**, on behalf of **Bullock Contracting, LLC, (Zuelke Gravel Pit)**, has submitted an application for a CUP to comply with the Gallatin County Interim Zoning Regulation for Operations that Mine Sand and Gravel or Operations that Mix Concrete or Batch Asphalt (“Interim Regulation”) prior to commencing any work onsite that is governed by the Montana Opencut Mining Act. The subject property is within the Interim Zoning District of Gallatin County.

The property is located on COS 1371, Southeast One-Quarter (SE ¼) and the Southeast One-Quarter (SE ¼), Section 32, Township Two North (T2N), Range Two East (R2E), P.M.M., Gallatin County, Montana. In general, the property is located at 565 Madison Road, approximately one-half mile south of Frontage Road and approximately one mile southeast of Three Forks, MT. Please refer to the vicinity map on page 3 of this report.

The Applicant’s proposed operation is to remove approximately 15,000 – 20,000 cubic yards (CY) of topsoil and excavate and haul off site approximately 200,000 – 250,000 CY yards of gravel barrow to create a 9.4-acres recreational pond within a 15.7-acre permit area. The gravel barrow material will be used for the Manhattan Frontage Road overpass project.

The Applicant has requested a 36-month permit which is scheduled to terminate on August, 2012 in conjunction with the approved Montana Department of Environmental Quality (MDEQ) Opencut Mining permit. The property is owned by Arthur Zuelke and will be operated by Bullock Contracting, LLC. The subject property lies within the boundaries of the Interim Regulation, is not subject to any other zoning requirements, and is within the jurisdiction of the *Gallatin County Growth Policy*.

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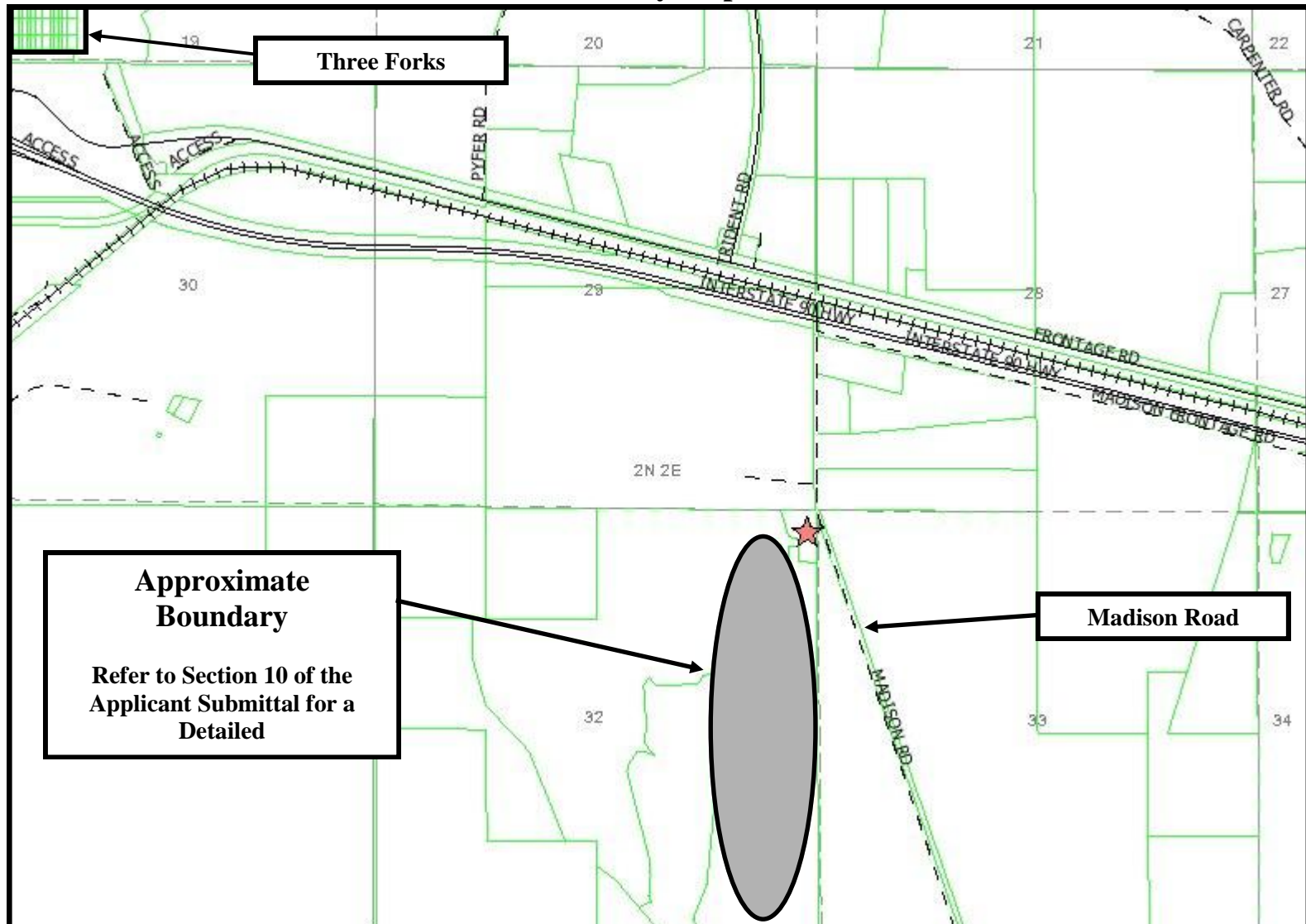
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## Vicinity Map



## INTRODUCTION TO THE INTERIM ZONING REGULATION:

The rapid population increase in Gallatin County during the early part of this decade has resulted in and significant changes to many of the Gallatin's communities. During this period Gallatin County has been the fastest growing county in Montana<sup>1</sup> adding 19,528 residents (or 28.8%) and the 96nd fastest growing county in the United States<sup>2</sup>. This population increase and corresponding increase in residential development undeniably requires the recovery of critical natural resources, such as sand and gravel and the processing of these resources into asphalt and concrete. Up until recently, the recovery of these natural resources and processing generally took place away from residential development and was thus immune from widespread conflicts with adjacent land uses.

Several recent proposals for new sand and gravel operations and the expansion of existing operations in areas of increasing residential development have brought to the forefront conflicts between these operations and environmental and neighborhood quality. Beginning in the fall of 2007, the County Commission began hearing requests by landowners living in close proximity to these operations to impose local land use standards (i.e. zoning) on new and expanding operations. It was these requests, in combination with perceived inadequate state review by the Montana Department of Environmental Quality (MDEQ) that lead to the imposition of interim zoning in all unzoned portions of Gallatin County on May 7, 2008.

These Interim Regulations were adopted by Gallatin County Commission Resolution No. 2008-053 pursuant to authority found in § 76-2-206, MCA. The Interim Regulations require most landowners or operators whose operation is regulated by the Montana Opencut Mining Act<sup>3</sup> to undergo review by Gallatin County for a Conditional Use Permit (CUP).

There are several general purposes and intents underlying the Interim Regulation. These include:

- a. promoting the public health, safety, morals, and general welfare;
- b. implementing the goals and policies set forth in the Gallatin County Growth Policy;
- c. promoting responsible recovery and processing of sand and gravel or other resources into concrete or asphalt by imposing reasonable conditions on sand and gravel operations and concrete or batch asphalt mixing operations within the boundaries of the Interim District including new mines or the expansion of existing mines; and

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<sup>1</sup> Montana Department of Commerce Census and Economic Information Center.  
<http://ceic.commerce.mt.gov/estimatescntypop.asp>.

<sup>2</sup> US Census Bureau 2007. Population Estimates by County. <http://www.census.gov/popest/estimates.php>

<sup>3</sup> Montana Department of Environmental Quality. <http://www.deq.state.mt.us/opencut/Index.asp>.

- d. requiring sand and gravel operations and concrete or batch asphalt mixing operations to provide adequate mitigation for significant adverse impacts to environmental and community resources caused by such operations.

In addition, there are several specific purposes of the Interim Regulation. These include:

- a. regulating sand and gravel mining operations and concrete or batch asphalt mixing operations and activities resulting from such operations, including the offsite hauling of raw or processed materials;
- b. protecting and perpetuating the taxable property value of the regulated property and adjacent and neighboring properties;
- c. providing for compatible uses on adjacent or neighboring properties;
- d. mitigating significant adverse impacts to state and county transportation facilities and systems resulting from activities regulated under this Interim Regulation in order to provide for the continued safe operation of those facilities and systems for the citizens of Gallatin County;
- e. minimizing health and safety risks to adjacent or neighboring properties and all citizens of Gallatin County resulting from activities regulated under this Interim Regulation;
- f. protecting surface and groundwater quality;
- g. preventing the degradation of soil, water, air and plant life from potential point and non-point pollution sources;
- h. preventing erosion resulting from activities regulated under this Interim Regulation;
- i. preventing the unreasonable depletion and degradation of natural resources including air quality, water quality, wildlife habitat, among others; and
- j. protecting the public from bearing the burden of impacts to public services and facilities by requiring activities regulated under this Interim Regulation to contribute their appropriate share of the costs of impacts resulting from those activities.

With these general and specific purposes and intents in mind, the Applicant's proposal is considered.

## **BACKGROUND:**

Aggregates and gravels are used as base construction materials in many facets of development and construction, including as critical material for structural foundations and roads. Although they are generally fundamental, low-value natural resources, the availability of gravel and construction aggregate is essential to construction, and in many respects, local and regional economic growth. While these resources are critical to development and construction, a major challenge associated with their production is the cost of transportation of the material from the mine and production location to the site for final use. Thus, because aggregate and gravel are low-value materials, and because the net cost of production raises quickly when accounting for transportation costs, these resources should be mined within a certain proximity to the final location of use. Although local market conditions vary, it is generally not cost-effective for the suppliers of these materials to haul aggregate more than 20 miles from its mining and production site.

Many localities nationwide have experienced shortages of construction aggregate. The ultimate reason for this shortage appears to be widespread urbanization, which, on the one hand, increases the demand for construction aggregates, and on the other, tends to remove aggregate-bearing lands from production through land development and zoning decisions that preclude mining. When sources of aggregate are eliminated locally, thus becoming more remote from the final places of use, the costs of construction can rise significantly. In high growth areas with rising land values, this is one factor that leads to potential conflicts between the land development and mining industries. Often these interdependent industries compete for use of the same land.

In Gallatin County, sand and gravel operations can involve many different processes. The degree of processing depends upon the type of finished product the operator is seeking to produce. The more refined the product the greater the on-site processing requirements. All use mechanical equipment, such as front end loaders, to extract the resources and stockpile for processing. Depending on the nature of the deposit and the market the operator is seeking, most operations will process the mined material into several grades of product from “pit run” to “washed” material.

In Gallatin County, not only does the type of product produced vary but also the ownership of these operations is diverse, from family owned operations to corporately owned large scale operations. The length of time the operations are active varies greatly, too. Several individual local operations have been in continual production for decades while others have been in production for only a limited period of time. Essentially, the rapid population increase Gallatin County resulted, until recently, in high demand for these resources and thus increased competition in the market and thus the request for several new operations.

The MDEQ regulates many facets of these operations through the Montana Opencut Mining Act (the “Act”) and associated administrative rules<sup>4</sup>. Currently, there are upwards of a dozen applications for new or expanding operations in Gallatin County before MDEQ. As part of the MDEQ application process, operators are required to obtain local government zoning approval if applicable. Thus, in order for the Applicant to obtain final approval from MDEQ under the Act it must obtain approval from Gallatin County under these Interim Regulations.

In Montana, Applicants for these operations are generally required to complete an Environmental Assessment under the Montana Environmental Policy Act (MEPA) [citation]. The Applicant has completed an EA and is included in the application materials. The EA discusses concerns related to water quality and quantity, traffic mitigation, air quality, and others. In addition to addressing the environmental factors, the Applicant’s submitted provides information on the potential impacts of the operations on property values within the area.

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<sup>4</sup> MDEQ ARM Title 17. <http://www.deq.state.mt.us/dir/legal/Chapters/Ch24-toc.asp>.

## STAFF FINDINGS:

- 1. Proposal Overview.** The application is for excavation of material for the construction of a 9.4-acre recreational pond. The estimated total quantity of mine material to be excavated is 200,000 – 250,000 cubic yards. The mining will occur within the Madison River Floodplain just east of the Madison River dike. The applicant has secured an approved Floodplain permit for the proposed operation from the Gallatin County Floodplain Administrator (Permit No. F09-043). The maximum mining depth will be approximately 24 feet. Static ground water depth is 6-feet below existing grade. The applicant proposes to conduct mining operations between 14 – 18 weeks.

The applicant is requesting a 36-month permit which is scheduled to terminate in August 2012 in conjunction with the MDEQ Permit. However, final reclamation, including reclamation of stockpile locations removal of temporary roads, is anticipated to be completed by the fall seeding window of October, 2010 according to the DEQ Opencut Permit. The CUP term is intended to cover un-anticipated fluctuations in the MDT project time line, weather and other unforeseen influences that would affect excavation and hauling. The CUP termination date roughly corresponds with the date of the initial MDEQ Opencut Mining application.

The property is owned by Arthur Zulelke and will be operated by Bullock Contracting, LLC. The subject property falls within the boundaries of the Interim Regulation, is not subject to any other zoning requirements, and is within the jurisdiction of the *Gallatin County Growth Policy*.

The Applicant seeks to employ an excavators, bulldozer, graders, haul trucks and dump trucks to excavate and remove the mined material. No onsite processing, asphalt production or concrete mixing will occur on site.

- 2. General Nature of the Operation.** Generally, the Applicant's submittal documents and DEQ Operations Plan provide a thorough overview of the project. The description can be found in Appendix (3) and (10) of the Applicant Submittal.

The operation begins by stripping topsoil and overburden exposing the material to be mined on the north end of the subject property which is anticipated to take 2 – 3 weeks. The gravel in this area will be mined to the existing ground water depth. For the next 2 – 3 weeks excavation will proceed in a southerly direction through the proposed pond boundaries (please refer to Sheet 3 and 4 of Appendix 10 for proposed pond dimensions) remaining above ground water depth. After all excavated material within the proposed pond limits has been removed down to the



existing ground water dewatering will begin and deeper excavation will commence to the proposed finish grades. The final phase of excavation is anticipated to take approximately 12 - 16 weeks. In total the operation is expected to take between 16 – 22 weeks followed by full reclamation. A detailed plan of operation is contained in Appendix C, page 2 part c of the Applicant Submittal.

3. **Phasing.** Although there is no formal phasing proposed for this operation the proposed action follows the following distinct aspects:

Phase	Action	Estimated Duration
1	Removal of top soils and overburden and mining the north end of the proposed pond area.	2 – 3 weeks
2	Removal of resource to ground water depth to the proposed pond boundaries.	2 – 3 weeks
3	Dewatering and mining to maximum depth	12 – 16 weeks
4	Reclamation	

4. **Proposed Onsite Equipment.** The Applicant Submittal states the operation will use excavators, bulldozer, graders, screen, haul trucks and dump trucks to excavate and remove the mined material. No scales are proposed on site of haul trucks.

No onsite processing (crushing), asphalt production or concrete mixing will occur.

5. **Adjacent Land Use(s).** The surrounding geography can be characterized as active ranch land composed of grassland, shrub-land, irrigation ditches and “typical” floodplain habitat. There are six (6) land owners within 1,000 linear feet of the permitted boundary and an additional 21 property owners between 1,000-feet and one mile of the operation. Not all property have been developed to include residential structures. According to Operation Plan description land use and structures (§I-D & E) in Appendix 10 of the Applicant Submittal there are four residential structures within 1,000-feet of the permit area.

6. **Proposed Hours of Operation.** The proposed hours of operation for this project are from 7:00 am to 7:00 pm Monday through Friday and some Saturdays as required by the contractor’s schedule and resources (page 2, Appendix C of the Applicant Submittal).

Monday – Friday	7 am – 7 pm
Saturday	7 am – 7 pm (as needed)
Sunday	Closed

7. **Hauling of Materials.** All mined material will be hauled from the site with commercial end-dumps, belly or side dump trucks (WB-67), onto Madison Road connecting to Frontage Road (Secondary 205). Madison Road is a County maintained road and Frontage Road is maintained by the Montana Department of Transportation (MDT).

The preferred haul route is Madison Road to Frontage Road, through Logan to the construction site just east of the town of Manhattan.

<u>Route</u>	<u>Distance</u>
Madison Road	0.5 miles
Frontage Road	10.0 miles
Total	10.5 miles

8. **DEQ Permitting Requirements.** The Montana Department of Environmental Quality (MDEQ) Opencut Mining Program governs all sand and gravel operations in Montana, in accordance with the Opencut Mining Act. An Opencut Mining Permit must be issued by MDEQ prior to operation. The permit addresses location, topography, surface disturbances, land uses, structures and facilities, surface water, water wells, water table levels, soils vegetation, wildlife, access roads, mining facilities and hauling, hours of operation, water protection, and reclamation plans. The reclamation plan must ensure that the applicant/operator will establish vegetative cover commensurate with the proposed land use, will appropriately protect ground and surface water, and will remove or bury metal and other waste. MDEQ will issue a permit only if the reclamation plan, bond, and other requirements of Title 82, Chapter 4, Part 4 are fulfilled.

MDEQ has not approved the Zuelke Opencut permit at the date of this hearing. The applicant has submitted an application which is pending before the Opencut division. Pursuant to the Interim Regulations the applicant has included the DEQ permit with their CUP application packet. The application is contained in Appendix J of the Applicant Submittal.

## **Environmental Impact Assessment**

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9. **Geology/Soils.** The proposed site is located in the historical Madison River floodplain and consists of a top layer of silty, sandy loam from 6” to 36” deep and sandy gravel/cobble to an undefined depth. The top soil material will be salvaged and stockpiled outside the floodplain boundary and replaced, disked and seeded to grass along the newly formed pond banks and in reclaimed stockpile areas. A lesser amount of removed materials will be stored for future ranching activities.
10. **Topography.** The main permit area is located in the historical Madison River floodplains just east of the Darlington Ditch and Madison River Dike. The terrain is primarily flat interlaced with irrigation ditches.
11. **Surface Water.** As stated in the applicant submittal Project Description and Environmental Assessment (EA) several irrigation ditches are within the subject property and permitted area. It was stated in the Applicant Submittal and EA that Sloan Ditch is within the subject property. Upon further examination it appears that Sloan Ditch is further to the south and east and that, in fact portions of the Neilson Ditch cross the subject property (Exhibit A). The proposed pond area is bounded by Darlington Ditch to the southwest. In addition the applicant possesses water rights for the subject property (No. 41F 110347-00 & No. No. 41F 110347-00). Both rights are fed by Madison River and controlled by headgate.

The applicant has stated that no surface water will be used or consumed by the proposed action. Through modulating the applicant’s existing water rights with dewatering volumes they intend to maintain downstream water flows at current levels. In addition, the applicant has stated he will file a change of water rights with the DNRC to address consumptive water use caused by evaporation by the increased water surface area by the creation of the 9.4-acre pond (Condition 12).

As stated earlier the operation will de-water the mined area and discharge back into the water user facility downstream. Page 2 of the EA states ground water pumped from the pond area will re-enter Neilson Ditch approximately one mile down gradient. To maintain downstream water quality the applicant has proposed that downstream flows pass through natural vegetation and settling basins prior to water re-entering the irrigation ditch system. The vegetative swales and settling basins are intended to remove suspended constituents pumped during dewatering. Due to the nature of the operation turbidity would be the primary water quality measure. Based on the submitted information it is unclear whether or not the proposed settling basins and vegetation swales will adequately address downstream silting and sediment transport caused by the action. Therefore Staff has suggested Conditions 11, 13 - 14 to maintain water quality for downstream water users.

- 12. Groundwater.** With the proposed action potential groundwater contamination does not appear to be a significant issue. Information about local wells obtained from the Groundwater Information Center (GWIC) operated by the Montana bureau of Mines and Geology indicated that static groundwater levels are 6 feet below surface level. The applicant stated mining operations will reach a depth of 24-feet or 18-feet below ground water depth.

Based on the proposed action and anticipated activities there appears to be limited opportunity for water contamination beyond turbidity. According to the operation plan there will no fuel storage on site, wash plant, crushing, asphalt or concrete plants. However, the proximity of the Madison River and the numerous agricultural water user facilities a Spill Prevention and Contingency Plan (SPCP) is recommended. The SPCP explains how Best Management Practices (BMP) would be implemented to protect surface and ground waters, and how spills of petroleum-based products would immediately be cleaned up and disposed of (Condition 14). Additionally, the Environmental Protection Agency (EPA) regulates the storage of some fuels and requires storage pursuant to federal regulations.

Recently, the Montana Supreme Court and the 18<sup>th</sup> Judicial District Court have addressed the investigation and findings of governing bodies in land use decisions as it relates to environmental issues and in particular, water quality. *See Flathead Citizens for Quality Growth, Inc. v. Flathead Bd. Of Adjustment* (2008 MT 1), and *Red Creek Ranch, LLC and Grayling Partners, LLC, v. Hebgen Lake Planning and Zoning Commission* (Op. in Ord. Cause No. DV-06-709AX and DV-06-743C). In these cases the courts noted that if a regulation, such as the Interim Regulation, requires a local governmental land use decision-maker to consider certain environmental issues the decision-maker must adequately address those issues and cannot defer their analysis and findings to a separate decision maker, such as MDEQ, with similar jurisdiction over the issue. As the Montana Supreme Court stated in *Flathead Citizens for Quality Growth*, “it is incumbent upon the Board to provide some level of factual foundation for [its] position.” *See* ¶ 59. Thus, because the Interim Zoning Regulation requires the Commission to review this CUP with impact to water quality and water quantity in mind, among other environmental concerns, the Commission must make specific findings on factors related to water quality and quantity and may not defer completely to MDEQ on these issues.

Considering the above, the Interim Regulation itself requires mitigation of impacts to groundwater. In fact, one of the primary purposes of the Interim Regulation is to protect surface and groundwater quality. Interim Regulation, Section 3.2.f; see also Section 6.1 (County Commission review criteria, provided below). Thus, Staff recommends the Commission directly address the relationship between groundwater quality and mining activity.

However, based on the available information, Staff has not identified any known impacts on ground water. There is, however, potential for degradation of surface water through storm water runoff. Although runoff from precipitation will be controlled on site implementing current stormwater BMPs is critical to maintaining water quality.

13. **Water Consumption.** A limited amount of water may be required for the proposed operation. According to the EA the applicant owns surface water rights, staff finding No. 11. The proposed pond, however, will require water due to evaporative water loss on the proposed 9.4-acre pond. The applicant stated they intend to file a change of water use with the Montana Department of Natural Resources Conservation (DNRC). Therefore, Staff has suggested a condition of approval to insure adequate water rights for the operation and mitigate potential impacts on down gradient water users (Condition 12).
14. **Reclamation.** Based on the MDEQ application and summary of the proposed operation the reclamation plan of the mine will be fully reclaimed by the fall seeding window of October, 2010. According to MDEQ timeframes reclamation shall be completed within 1 year on an area no longer needed for open cut operations. Upon the completion of mining operations the mined area will be returned into a recreational 9.4-acre pond.

Final reclamation, including reclamation of stockpile locations removal of temporary roads, is anticipated to be completed by the fall seeding window of October, 2010. The CUP term is intended to cover un-anticipated fluctuations in the MDT project time line, weather and other unforeseen influences that would affect excavation and hauling. The CUP termination date roughly corresponds with the date of the initial MDEQ Open cut Mining application.

15. **Air Quality.** Air quality will be impacted through gravel mining. Contributing factors include excavation of topsoil and other soil resources (e.g., subsoil, overburden), excavation of aggregate, processing of gravel (e.g., crushing, screening, loading, and/or hauling), truck traffic to and from the site causing road dust, movement of heavy equipment on site, and exposed stockpiles. Particulate matter (PM) is the primary pollutant from mining and rock crushing activities. DEQ maintains three monitoring stations for particulate matter in Gallatin County – City of Bozeman, Belgrade, and West Yellowstone.

There are different impacts to air quality depending on the size and type of material being disturbed. Clay, for example, is quite fine and contains silicates which may pose more of a health concern than coarser materials such as sand. Impacts from excess dust could include respiratory problems, safety concerns associated with driving, and cleanliness of personal property both indoor and outdoor. Adapting equipment and site operating practices can decrease the amount of dust generated by mining operations. MDEQ does not appear to offer dust control best management practice (BMPs) information. Idaho Department of

Environmental Quality has published a dust control manual<sup>5</sup>. Other industry mitigation efforts could include the following:

- Enclosing crushers to minimize dust levels;
- Using fine spray or a misting system on crushing machinery;
- Placing a screening system around the crushing equipment and/or on the upwind side of the operation;
- Placing crushers in the excavated area (i.e., best to set up equipment in a low area of the pit to decrease exposure - this also has the benefit of reducing noise);
- Paving roads that have intensive or regular use;
- Watering traffic lanes during dry periods to prevent loss of fines due to vehicle movement;
- Considering material handling practices and shape of stockpiles (e.g., placement of gently contoured topsoil stockpiles on adjacent agricultural land so they can continue to be farmed during mining operations, allow access on top of stockpile for weed spraying and make them cigar-shaped, facing the prevailing wind);
- Considering prevailing wind direction (e.g., move stockpile material from the downwind side and do not have a rough exposed face when working);
- Considering the size and type of equipment for the job;
- Developing and implementing contingency plans (e.g., if there are heavy winds and insufficient control measures in place, shut down operations until the dust level subsides); and
- Consider using dust (particulate matter) monitoring equipment to provide factual information in case of disputes.

Air quality in Gallatin County may be degraded due to the emissions from the proposed site but the activities and ambient air impact would be limited by DEQ's Air Resources Management Bureau (ARMB). DEQ has an EPA-approved air quality program defined in the Clean Air Act of Section 75-2-20, MCA that meets federal standards.

It is anticipated suspended particulate matter will be created through wind interaction with aggregate stockpiles. Mitigation includes dust suppression through Best Available Control Technology (BACT) which typically includes the use of water and water spray water and water spray bars.

The MDEQ ARMB evaluates plant emissions, based on acceptable emissions inventory factors obtained from federal and State guidance documents, and establishes appropriate limitations to ensure compliance with the National Ambient Air Quality Standards (NAAQS) and Montana Ambient Air Quality Standards for these types of operations. The NAAQS are set at levels that are

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<sup>5</sup> Idaho Department of Environmental Quality. Supplemental Fugitive Dust Control Information. [http://www.deq.state.id.us/air/prog\\_issues/pollutants/dust\\_control\\_plan.pdf](http://www.deq.state.id.us/air/prog_issues/pollutants/dust_control_plan.pdf)

protective of human health and the environment. Sources that have potential air emissions above the permitted threshold are required to obtain permits from ARBB. The general nature of the operation will limit the amount of PM that will be generated. There will be no cruising, asphalt batching or concrete mixing on site. The hauling of materials will be the primary cause of PM. The applicant has proposed a dust mitigation plan to mitigate possible negative effects from hauling activities. However, to ensure compliance with these regulations and mitigate potential negative effects on neighbors and the environment staff has suggested Conditions 28 and 29.

- 16. Vegetation.** Native upland range grasses and pasture typical of riverine floodplain dominate in the main permit area with areas of Russian Olive and Buffalo Berry brush surrounded by some Cottonwood trees. According to the EA, found in Appendix J of the Applicant Submittal, the Montana Natural Heritage Program reported no species of special concern. Scattered noxious weeds are present throughout the permit area including Canada thistle and Houndstongue. Infestations of Knapweed are present along portions of the haul road and proposed stockpile site. There are no known rare plants, cover types, or species of special concern on the subject property.

The applicant has secured an approved weed management plan for the Zuelke pond project under Appendix E of the Applicant Submittal. The weed management plan is required pursuant to the submittal requirements and the DEQ Opencut permit application.

- 17. Wildlife.** Part 5 of the EA discusses terrestrial, avian and aquatic life and habitat. The Montana Natural Heritage Program identified two species of concern in the area of the proposed operation; Feffuginous Hawk and the Greater Short-horned Lizard. Both species are found in habitat that will be disturbed by the proposed action. However, the EA states that a relatively small area will be affected and that abundant similar habitat exists in the area. Section I-K of the Opencut Mining application states the ditch on the east side of the subject property, outside of the permit area, supports at least a moderate number of fish species. The vegetation and habitat support deer, birds, and other small mammals. Conversation's Staff has had with the land owner suggest moose are rarely found on site due to a worm infestation years ago. Site inspections revealed deer stands near the proposed haul route. The operations plan prohibits construction equipment to interfere with the ditch on the eastern edge of the permitted area and proper erosion control measures will be formalized through the DEQ Stormwater Discharge Permit.

Although the operation will temporarily interrupt historical migration patterns and permanently remove 9-acreas of vegetation, the resulting pond will provide habitat for fish, migrating birds and other mammals.

- 18. Access/Roads/Traffic.** Madison Road provides primary access to the property and connects to Frontage Road ½ mile to the north of the entrance to subject property. As stated in Finding No. 7 above Madison Road is a County maintained road and Frontage Road is maintained by the Montana Department of Transportation (MDT). The posted speed limit on Frontage Road is 70/60/55 for passenger vehicle, trucks and all vehicles at night, respectively. Madison Road passes under I-90, crosses over a Montana Rail Link (MRL) rail line spur just north of I-90 and Three Forks paved multi-use trail terminates at Madison Road. Approximately 158-feet of distance between separates the rail line and the intersection of Frontage Road.

The submittal requirements of the Interim Regulation require a Transportation Impact Study (TIS). However, a waiver of study requirements may be requested pursuant to Traffic Impact Study Requirements (Exhibit B). The Applicant has submitted a waiver requires from the TIS. The Applicant's request can be found in Appendix D of the Applicant Submittal. According to §5 of the TIS study requirements:

*Upon request from the applicant the requirements for a TIS, or the study elements listed in Minimum TIS Requirements, may be waived or modified by the Planning Director following consultation with a representative of the Gallatin County Road and Bridge Department and/or Montana Department of Transportation. The applicant shall document the reasons for the waiver or modification. Factors to be considered include, but are not limited to:*

- a. roadway improvements are scheduled that are expected to mitigate any impacts associated with the proposed project; and*
- b. a similar TIS was previously prepared for the site and is still considered applicable.*

### **Madison Road Condition**

Madison Road has a gravel surface from the entrance of the subject property north for 0.4 miles to a section of millings to the intersection of Frontage Road. The gravel surface of Madison Road averages 24-feet in width. The millings section of Madison road constricts to approximately 21-feet in width at the crossing of the Montana Rail Link (MRL) rail line. The Road and Bridge Department characterized the millings section of Madison Road in poor condition with numerous pot holes and in deteriorating condition. Conversation with Mr. George



Durkin, Road and Bridge Department, and Mr. Arthur Zuelke, subject property land owner, estimated the age of the millings to be more than 10 years old.

The Gallatin County road & Bridge Department submitted comment in a letter dated July 8, 2009 (Exhibit C). The Road & Bridge Department requires an approach permit which includes provisions to address fugitive dust and a signage plan. In addition Lee Provance, Road and Bridge Superintendant, required the following notice to be included as a condition of approval.

*The applicant is hereby advised that nothing stated in these conditions shall supersede Montana state law or Gallatin County policies. The Gallatin County Road and Bridge Department retains its right to limit weight and temporarily limit or forbid any class of traffic as specifically and explicitly stated in MCA 7-14-2102, 7-14-2127, 61-10-128, Gallatin County Resolution 89-773 and Gallatin County Road and Bridge Policy 2000.3. Violations of restrictions shall be enforced and forfeiture or removal of the applicant's access may occur.*

According to the submittal information no scales will be on site. Without specific knowledge of haul loads it will be difficult to assess whether or not legal weight limits will be maintained and limiting degradation of the roadway surface. In addition to the safety concerns, load limits on Madison Road may be imposed. The operator will be unable to show compliance with any weight restrictions that are imposed. Therefore, Staff has suggested Condition 21 to promote safety and maintain proper haul truck loads.

### **Intersection of Madison Road and Frontage Road**

According to the DEQ Operations Plan the applicant states a variety of haul trucks will be used for the project depending on resources available. Typical haul trucks include commercial end-dumps, belly or side dump trucks (WB-67), onto Madison Road connecting to Frontage Road. Staff has included minimum turning radius diagrams for passage cars and WB-67 design vehicles (Exhibit D). Based on the information provided it is unclear whether or not the existing Madison Road turning radius will accommodate haul truck traffic without encroachment into westbound traffic lanes on Frontage Road as described in bullet point one on the comment letter from MDT dated July 13, 2009 (Exhibit E). Based on the aforementioned Staff has suggested Condition 20 to mitigate potential deterioration of the intersection of Madison and Frontage Roads

### **Rail Line**

Montana Rail Link (MRL) submitted comments in a letter dated July 15, 2009 and is included in the report as Exhibit F. MRL articulated concern about the durability of the rail crossing, line of site and the distance between the edge of the road and the railroad crossing. Currently there is an average of two (2) crossings

per day. The time of crossing vary depending on day of week. The crossing is uncontrolled. However, STOP signs are in place traffic in both directions.

MRL maintains the wood plank surface crossing as required by state law for “normal or ordinary traffic” expected for this road. Based on the additional traffic and loads anticipated by this project the crossing would require replacement at least twice during the truck haul. MRL provided two alternatives to address this concern. Therefore Staff has suggested a condition of approval to mitigate the safety and ensure Madison Road will allow continuous traffic flow for the operator and residents (Condition 19). MDT concurred with the concerns issues raised by MRL.

Based on onsite evaluation it appears line of site is more than adequate to meet the minimum requirements set by MRL.

19. **Cultural Resources.** According to the Environmental Assessment there are no known cultural resources on the subject site.
20. **Property Value.** Economists have found “hedonic pricing models” are useful in isolating the contribution of specific factors on the price of housing. Although the merits of statistical analysis are beyond the purview of this report hedonic pricing models<sup>6</sup> can be characterized as a method of estimating value. The price of a property is determined by the characteristics of the house (size, appearance, features, condition) as well as the characteristics of the surrounding neighborhood (accessibility to schools and shopping, level of water and air pollution, value of other homes, etc.) The hedonic pricing model would be used to estimate the extent to which each factor affects the price.

There is limited geographically proximate research that can be applied in Gallatin County. The most relevant analysis, commissioned by MDEQ, titled, “*Gravel Pits: The Effects on Neighborhood Property Values*” (published in February 1998) did not employ the standard hedonic method<sup>7</sup>. This report employed sales comparison technique. As stated in the Applicants Submittal, this report found that gravel pit operations had limited, if any, negative measurable value effects on surrounding property. Data was culled from 1993 to 1998.

However, the only rigorous study to date measuring the effects of gravel mine on nearby residential values<sup>8</sup> found a large statistically significant effect of distance from a gravel mine on home sale price. Controlling for other determinates the author found a negative impact on home price with respect to distance from a

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<sup>6</sup> For more information - Hacket, Stephen C., 2006. Environmental and Natural Resources Economic: Theory, Policy and the Sustainable Society. M.E. Sharpe. 524 pgs.

<sup>7</sup> Rygg, Philip J., 1998. “Gravel Pits: The Effects on Neighborhood Property Values.” The Montana Department of Environmental Quality.

<sup>8</sup> Hite, Diane, 2006. “Summary Analysis: Impact of Operational Gravel Pit on House Values, Delaware County, Ohio.” Auburn University.

gravel mine. The author found the closer the home to a gravel mine the greater the loss in house value. The analysis suggested the loss in property value results from the negative consequences of the mining operation and reflects the deterioration in the areas quality of life due solely to the operation of the gravel mine.

On the other hand, it should be noted the available data and analysis seems to suggest that the loss in property value is temporary. Upon full reclamation and the ceasing of the mining operation the real or perceived loss in property value is regained. As stated earlier the requested duration of the CUP is 24 months. The proximity of the residential structures are distal from active operations and there will be no processing, batching, concrete mixing on site potential effects on property values have been greater reduced. In addition those owners of those residences have submitted letter of approval for the proposed operation. The letters of support are included in Appendix J of the Applicant Submittal. Due to the operational parameters and the temporary nature of the proposed operation property value devaluation is anticipated to negligible. Appendix F elaborates on the analysis.

Therefore, Staff has not included a specific condition of approval to address concerns regarding property values; rather, Staff suggests the County Commission consider this finding in your discussion and decision. If specific mitigation or a condition of approval is required, Staff will be available to assist in drafting this condition during board discussion.

21. **Economic Benefit/Degradation.** It is unclear the extent to which Gallatin County receives *direct* economic benefits from the proposed gravel mine. Because of its weight and low-value, gravel is hauled for only short distances and, therefore, does not add significantly to the basic economy of the region. Essentially, economic activity in a region can be broken down into two components: activity which meets local, internal demand and activity which meets non-local demand. The former is non-basic; it serves the area but does not, on its own, cause the economy to grow. The latter category is basic and provides an engine for local economic growth because it is the demand from beyond the area which causes the area to grow.

While the gravel industry as a whole in Gallatin County in 1999 employed 98 people<sup>9</sup>, and provides critical material for the construction industry, the economic value of a proposed gravel mine must also be viewed in relation to the potential environmental impact on Gallatin County, the potential impacts on residential property values in the area. According to the Gallatin County GIS Department there are 52 MDEQ approved or pending gravel pits in Gallatin County. Currently, there is no data indicating the need for aggregate material needed in

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<sup>9</sup> Montana Dept of Labor and Industry (ES-202 program).

Gallatin County nor the number of additional employment the proposed gravel mine will create.

The potential employment of the proposed operation impact would most likely be limited. In a report commissioned by the Richland Michigan Township Planning Commission<sup>10</sup> concluded that a 253-acre gravel mine would add 2 additional new jobs to the area. Due to the low value, non-basic nature of the product the Richland, Michigan activity did not generate any significant new income or employment opportunity to the area (Erickcek 2006).

Therefore, it does not appear the proposed gravel mine would result in any significant direct net benefit to the area from job or income creation.

22. **Fire Mitigation.** The proposed operation is within the Three Forks Rural Fire District (TFRFD). To promote site safety and minimize the potential of catastrophic events Staff has suggested that the Applicant shall notify the TRFD District regarding all access, parking, fire suppression, and emergency evacuation plans (Condition 33).
23. **Noise.** During the hearings on the adoption of the Interim Regulation, noise was a particular concern for neighboring residents. Noise contributors in pit operations include heavy trucks, vehicles, machinery (crushers, screeners, backhoes, etc.), conveyer systems, open pumping systems for water activities, and back up alarms. If proper sound control features are incorporated into facility design in the planning stages, sound levels can be kept to acceptable minimums. Methods to reduce the amount of noise generated on a site could include the following:
  - Suppression by enclosure of pumps or other systems;
  - Enclosure of crushers (e.g., use of a blanket system around the outside of a plant to absorb sound);
  - General restriction on operations (e.g., reduce or restrict the use of engine retarder brakes and reduce the amount of heavy gearing);
  - Selection of equipment that has taken noise reduction into account;
  - Consideration of equipment siting (e.g., crusher set up in low areas, use of stockpiles as sound barriers, and operational design of pit); and
  - In instances where pit operations are close to residential areas, the use of sound monitoring equipment is encouraged to provide factual information in case of disputes.

Again, there will be no processing of materials on site, the operation is a short term and non-compatible land use is nonexistent with this operation there is very low probability noise will negatively affect residents in the area. However, Mine Safety and Health Administration (MSHA) requires all operations to comply with

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<sup>10</sup> Erickcek, George A., 2006. "An Assessment of the Economic Impact of the Proposed Stoneco Gravel Mine Operation on the Richland Township." W.E. Upjohn Institute for Employment Research.

mine safety provisions to minimize exposure to hazardous sound levels resulting in the development of occupational noise-induced hearing loss (NIHL).

- 24. Notice.** Legal notice of the Commission hearing was sent to property owners adjacent to and 1,000 feet of the subject property via certified mail. Property owners between 1,000 feet and one mile were notified via US Mail. Notice was also published in the *Bozeman Daily Chronicle* on January 11<sup>th</sup> and 18<sup>rd</sup>, 2008 with a banner ad and legal notice.

Staff has received a number of phone calls requesting additional information on the mature of the proposed operation but has not received written comment as of the date of this report. Letters of support contained at the end of Appendix 10 in the Applicant Submittal.

## **GALLATIN COUNTY GROWTH POLICY COMPLIANCE:**

The *Gallatin County Growth Policy*, adopted April 15, 2003, applies to this application pursuant to §6.1(a) of the Interim Regulation. As stated in Section 1.1 (Scope and Purpose), the *Growth Policy*'s principle purpose is to provide general direction for decisions relating to land use. In addition to the specific goals and objectives contained within the *Growth Policy* another primary purpose is to guide those land use decision so that growth occurs in a coordinated, logical, and cost-effective manner that minimizes unplanned, costly sprawl.

The Applicant provided in its submittal a commentary on compliance with the *Growth Policy*. The applicant's commentary highlighted similar goals and objectives of the *Growth policy*.

The findings below are provided by Staff based upon review and with consideration given to suggested conditions of approval. Specific to this Application, the Commission should consider the general intent and purposes of the *Growth Policy* and the following specific goals and policies when evaluating the proposed operation.

### ***Policies Related to Environmental Concerns:***

#### **3.1 Water Quality**

GOAL 1: Protect Water Quality

Policy 7: Encourage development to document efforts to protect water quality.

Policy 8: Encourage heavy industrial uses, including animal feeding operations, to document mitigation of adverse impacts on surface and ground waters.

**Staff Findings:** Generally, through adequate mitigation measures, the operation will protect both surface water and groundwater quality. In addition to requirements imposed by MDEQ and identified in the MDEQ EA, this operation will protect surface water quality by containing all surface runoff onsite, provides ample geographic distance from water features and prohibit processing of materials on site. These measures, in addition to requirements imposed by MDEQ and Gallatin County, will adequately protect surface water quality. Due to site specific considerations potential affects to groundwater will be minimal.

Finally, the enforcement mechanisms in the Interim Regulation provide an adequate remedy for neighbors to request Gallatin County enforce the conditions of approval. Through these mitigation measures, the operation will be ensuring it will protect water quality.

### **3.4 Air Quality**

GOAL 1: Protect Air Quality

Policy 2: Require development to demonstrate compliance with local, State and Federal air quality regulations or standards.

Policy 3: Encourage development to protect air quality and reduce particulate matter.

- Encourage development to minimize vehicle miles traveled.

**Staff Findings:** Generally, through adequate mitigation measures, the operation will comply with the above goal and policies to protect air quality. First, the operation is required as a condition of approval to obtain a permit under the Clean Air Act, if required by MDEQ. Second, the operation is required by the conditions of approval to prevent impacts to air quality through the use of tactifiers or other dust control measures on all driving surfaces and stockpiles of material and the seeding of topsoil stockpiles. Thirdly, the operator will be required to apply magnesium chloride as dust mitigation measures to address rouge particulate matter. Finally, the enforcement mechanisms in the Interim Regulation provide an adequate remedy for neighbors to request Gallatin County enforce the conditions of approval. Through these mitigation measures, the operation will be ensuring it will protect air quality.

### 3.5 Soils

#### GOAL 1: Minimize Soil Erosion

Policy 1: Ensure development demonstrates compliance with local, State and Federal regulations and standards relating to soil erosion.

Policy 2: Encourage development to comply with re-vegetation and weed control plans as prescribed by the Gallatin County Weed Department through proper weed management plans and memorandums of understanding

**Staff Findings:** Generally, the very low slopes and topography of the area, proper stockpile storage operation will protect soil erosion. Topography of the subject site will be improved for future agricultural production which minimizes water runoff and erosion and will improve future habitat. First, the operation is required as a condition of approval to obtain a permit under the Opencut Mining Program which, in part, through the MDEQ permit conditions, will mitigate potential negative externalities caused by the operation. Secondly, the Applicant will be required by the conditions of approval to secure an approved Weed Management Plan from the Gallatin County Weed District. The Plan is in force for the duration of the operation. Finally, stormwater management BMPs will be integrated into the operation. These include such measures and seeding of berms and the use of silt fencing.

Moreover, as required by the conditions of approval overburden stockpiles will be revegetated during storage to control for weeds and erosion.

#### ***Policies Related to the Location of Commercial and Industrial Development.***

The adoption of interim zoning was done in compliance with several main goals in the *Growth Policy*. The *Growth Policy* includes a goal to “Local Commercial and Light Industrial Development in Areas Planned or Zoned for that Usage” as well as a goal to “Manage Heavy Industrial Development.” Chpts. 3.8 and 3.9, pg. 25. Specific to the goal of locating industrial development in areas planned or zoned for that use the *Growth Policy* states, as a policy, to “prevent the encroachment of industrial uses into residential areas.” Specific to the goal of managing heavy industrial development, the *Growth Policy* states, as a policy, to “locate heavy industrial development in areas that have minimal adverse impact on other uses, and in areas planned or zoned for heavy industrial development.”

In this case, characterizing this geographic area for a determination of whether the area is “residential” is conclusive. As described in Finding #5, above, the area is comprised of a mix of agricultural and low density rural residential which is predominately focused on supporting the agricultural production. Therefore, the proposed use does not appear to directly conflict with goal 3.8 and 3.9.

### 3.8 Commercial and Industrial – Light

GOAL 1: Locate Commercial and Light Industrial Development in Areas Planned or Zoned for that Usage.

Policy 1: Encourage development or document and provide adequate infrastructure for new commercial and light industrial development.

Policy 5: Encourage development to document:

- Consistency with the Growth Policy and applicable regulations.
- Mitigation of adverse impacts.
- Availability of adequate local services and public facilities.
- Compatibility with existing uses and natural environment.
- Compatibility with logical expansion of local services and public facilities.

**Staff Findings:** Generally, through adequate mitigation measures, the operation will comply with the above goal and policies to locate industrial development in appropriate areas. It has yet to be determined whether or not the operation will not adversely burden existing infrastructure by its nature. However, through the proposed mitigation those concerns should be adequately addressed. In addition, dispersion of gravel mines inherently mitigates infrastructure demands. *Growth Policy* objectives will be further realized through dust control measures, noise abatement, hours of operation, and monitoring.

### 3.9 Commercial and Industrial - Heavy

GOAL 1: Manage Heavy Industrial Development

Policy 1: Locate heavy industrial development in areas that have minimal adverse impact on other uses, and in areas planned or zoned for heavy industrial development.

Policy 2: Encourage heavy industrial development to document:

- Consistency with the Growth Policy and applicable regulations.
- Mitigation of adverse impacts.
- Availability of adequate local services and public facilities.
- Compatibility with existing uses and natural environment.
- Compatibility with logical expansion of local services and public facilities.

Policy 3: Ensure development demonstrates compliance with local, State and Federal regulations and standards for: soil, water and air contamination.



**Staff Findings:** Generally, through adequate mitigation measures, the operation will comply with the above goal and policies to locate commercial and heavy industrial development in appropriate areas. The operation may adversely burden existing infrastructure by its nature although mitigation will ameliorate impacts. Further, the applicant has performed additional mitigation including the application of dust suppression on Madison Road and that dispersion of gravel mines inherently mitigates infrastructure demands. *Growth Policy* objectives will be further realized through dust control measures, noise abatement, hours of operation, and monitoring.

#### **CRITERIA FOR COUNTY COMMISSION REVIEW:**

**Section 6.1 of the Interim Regulation, provided below, contains the required findings for approval. Please note the Applicant's submittal material contains a detailed discussion of the required approval criteria.**

- 6.1. Conditional Use. A Conditional Use Permit (CUP) shall be obtained prior to commencing work onsite for all new Operations or the expansion of existing Operations following the CUP procedure described below. Granting of a CUP is contingent upon fulfillment of conditions imposed by the Commission pursuant to Section 6.3 and the requirements of Section 6.4.

CUPs shall be issued by the Commission only upon finding:

- a. The Operations conform to the objectives of the applicable growth policy having jurisdiction over the proposed Operations site (Gallatin County Growth Policy or the Belgrade Growth Policy, and the Four Corners Community Plan) and the purposes and intent of this Interim Regulation;
- b. The Operations will not have significant adverse impacts on nearby properties, property values, nearby land uses, or nearby residents;
- c. The Operations will not have significant adverse impacts on groundwater, streams, or wetlands or, if significant adverse impacts are identified, the Applicant shall enter into a written agreement with Gallatin County providing for mitigation, including the provision of financial security, for the identified impacts;
- d. The Operations will not have significant adverse impacts on public services and facilities or, if significant adverse impacts are identified, the Applicant shall enter into a written agreement with Gallatin County providing for mitigation, including the provision of financial security, for the identified

impacts;

- e. The Operations meet all other applicable federal, state or local regulations, including the Requirements of section 6.4 below; and
- f. A public hearing, after notice has been given, has been held.

**In addition, Section 6.2 provides the Commission with the ability to specify the time a CUP under the Interim Regulation is approved for:**

- 6.2 Permits, Terms of Issuance. A CUP may be issued for a revocable, temporary, permanent or term period. All CUPs issued for a definite term shall expire at the end of the term. Extensions can be obtained by following all procedures and payment of fees required for the original permitting.

**Finally, Section 6.3 of the Interim Regulation provides authority for the County Commission to impose “reasonable limitations or conditions” on the operation to ensure compliance with the goals and objectives of the Interim Regulation and the Gallatin County Growth Policy:**

- 6.3 Permits, Conditions. The Commission may make the granting of a CUP subject to reasonable limitations or conditions as it may deem necessary to protect the public health, safety, morals, and general welfare, to reduce significant adverse impacts on nearby property or residences, to preserve the character of the area, to mitigate significant adverse impacts, and to give effect to the purposes and intent of this Interim Regulation. The conditions may include but are not limited to the following:
- a. Vehicular ingress and egress.
  - b. Right-of-way.
  - c. Lighting.
  - d. Term of the Operation.
  - e. Signs.
  - f. Noise.
  - g. Dust and other air quality parameters.
  - h. Vibrations.
  - i. Erosion.
  - j. Protection of water quality and quantity.
  - k. Regulation of the time of activities, which may include a provision for operating beyond the required hours of operation under special circumstances.
  - l. Landscaping and maintenance thereof.
  - m. Placement of uses on the property.
  - n. Method of water disposal.

- o. Nature and extent of use.
- p. Noxious weeds.
- q. Public safety measures, including fire protection.
- r. Submission of periodic monitoring reports.

## **GALLATIN COUNTY COMMISSION DETERMINATION(S):**

In evaluating the application, the Commission must make adequate and defensible findings supported by facts on all the determinations listed below. The Commission, at the Commission hearing, may incorporate the staff findings and others in its determinations.

### **The following determinations are required:**

1. Does the proposed operation conform to the objectives of the Gallatin County Growth Policy and the purposes and intent of this Interim Regulation?
2. Will the operation have significant adverse impacts on nearby properties, property values, nearby land uses, or nearby residents or, if significant adverse impacts are identified, has the applicant provided for adequate mitigation, including the provision of financial security, for the identified impacts?
3. Will the operation have significant adverse impacts on groundwater, streams, or wetlands or, if significant adverse impacts are identified, has the applicant provided for adequate mitigation, including the provision of financial security, for the identified impacts?
4. Will the operations have significant adverse impacts on public services and facilities or, if significant adverse impacts are identified, the Applicant provided for adequate mitigation, including the provision of financial security, for the identified impacts?
5. Has or will the operations be required to meet all other applicable federal, state or local regulations, including the Requirements of section 6.4 of the Interim Regulation?
6. Has public comment been adequately addressed and considered?
7. Has a public hearing, after notice has been given, been held?

## **SUGGESTED CONDITIONS:**

If the Commission recommends approval of this application, Staff suggests the following conditions:

1. For the duration of the operation, all facets of the operation shall be in substantial compliance with the information, discussion, and proposed mitigation included in the application for this CUP. Any deviation from the proposals suggested in the application materials may be considered a violation of this condition.
2. Unless otherwise authorized by these conditions of approval, prior to commencing any onsite mining or processing operations, Applicant shall demonstrate compliance with any pre-operating conditions of approval contained herein and obtain a Land Use Permit from the Gallatin County Planning Department. No fee shall be charged for the Land Use Permit.
3. The operation shall be permitted to operate for a period of 36 months from the date of issuance of the MDEQ Opencut Permit. All other enforcement provisions pursuant to the Regulation shall apply at all times.
4. Applicant shall record with the Gallatin County Clerk and Recorder a waiver of right to protest, approved in form and content by the Gallatin County Attorney, any future Rural Improvement Districts (RIDs) or Special Improvements Districts (SIDs).

### **Hours and Duration of Operation**

5. Hours of operation for all facets of the operation, including maintenance, shall be restricted to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday.
6. Saturday operations are limited to 7:00 a.m. to 7:00 p.m. for loading, hauling, and maintenance. No other operations are permitted.
7. No operations shall commence on Sunday.
8. The approved Conditional Use permit for the Zuelke Gravel mining operation shall be valid for a term of 36-month beginning with the issuance of the MDEQ Opencut Permit, excluding reclamation.

## **Environmental Quality**

9. Prior to issuance of a Land Use Permit, the Applicant shall provide adequate on-site sanitary facilities for employees.
10. If, at any time during operations any other environmental permit, such as required by the federal Clean Air Act or Clean Water Act, are required by any other federal, state, or local permitting agency, the Applicant shall obtain approval for the appropriate permit and provide a copy of the application and approval to the Gallatin County Planning Department.
11. Prior to commencing active mining operations, Applicant shall submit written permission the Planning Department from the water users or water conveyance facilities authorized representatives prior to discharging any water (or causing any water to be discharged) into any water conveyance facility.
12. Prior to completion of the pond construction, the Applicant shall provide proof of a change in use of surface water rights by the Montana DNRC.
13. Prior to issuance of a Land Use Permit, the Applicant shall enter into a binding Memorandum of Agreement with the \_\_\_\_\_ Canal Ditch Company (XXDC) indicating any mitigation measures to be undertaken before, during, and after operations to protect the water quality and quantity in the \_\_\_\_\_ Canal, if applicable.
14. Applicant shall provide a Spill Prevention and Contingency Plan (SPCP) to the Planning Department prior to hauling any material off site.
15. Prior to issuance of a Land Use Permit, drainage plans for the operation shall be submitted to the County and approved by MDEQ, if required.
16. The applicant shall not store hazardous materials such as unleaded fuel onsite. Diesel fuel shall be contained in a manner prescribed by MDEQ.

## **Roadway Improvement and Traffic Safety**

17. An approved encroachment permit shall be obtained from the County Road and Bridge Department for any access from the proposed pit to Madison Road, a county maintained roadway. The applicant shall prepare Madison Road and apply magnesium chloride (MC) for dust control from the project site to its intersection with U.S. Highway 205. The MC shall be properly maintained to provide adequate dust control abatement for the length of the gravel hauling project; which may include re-grading and additional MC application.

18. All areas within public right-of-ways disturbed by construction shall be sodded and seeded and controlled for noxious weeds.
19. The Applicant shall install a permanent concrete crossing surface, upon design approval from Montana Rail Link, on Railroad Grade Crossing – DOT #091-455-E prior to hauling material offsite.
20. If required, in consultation with the Gallatin County Road and Bridge Department the Applicant shall improve the intersection of Madison Road and Frontage Road to accommodate haul truck movement without encroachment into westbound traffic lanes on Secondary 205 (Frontage Road).

The Applicant shall either: a) complete the required access road construction prior to issuance of a Land Use Permit, or b) enter into an improvements agreement with the County for the completion of the required road improvements. The improvements agreement shall comply with all requirements of the Gallatin County Subdivision Regulations.

A pre-construction meeting shall be conducted with the Gallatin County Road and Bridge Department prior to the start of any road construction.

All roadwork shall be built to Montana Public Works Standard Specifications (Current Edition), and shall be inspected and certified by a Montana registered civil engineer. The applicant shall obtain written verification from the County Road & Bridge Department that all road(s) have been brought to County standards. Final approval will not be given until this documentation is received.

A two (2) year written warranty from the contractor shall be required for all road improvements. The warranty shall be submitted to the County Road & Bridge Department prior to final plat approval.

21. The Applicant shall install temporary weigh scale on site. All loaded haul trucks shall be weighed prior to entering County or State maintained roads and shall comply with all applicable weight limits for the truck size and/or number of axles.
22. The applicant is hereby advised that nothing stated in these conditions shall supersede Montana state law or Gallatin County policies. The Gallatin County Road and Bridge Department retains its right to limit weight and temporarily limit or forbid any class of traffic as specifically and explicitly stated in MCA 7-14-2102, 7-14-2127, 61-10-128, Gallatin County Resolution 89-773 and Gallatin County Road and Bridge Policy 2000.3. Violations of restrictions shall be enforced and forfeiture or removal of the applicant's access may occur.

### **Noise Suppression**

23. Notwithstanding any other condition, if audible backup alarms are installed on any on-site equipment all backup alarms shall be Mine Safety and Health (MSHA) – approved and not exceed MSHA approved sound levels.
24. Equipment selection shall be commensurate with geographic location to minimize noise.
25. High-grade mufflers or other sound-dampening devices shall be installed on all diesel powered generators and equipment to reduce noise impacts.
26. The use of Jake (compression) brakes on hauling trucks shall be prohibited on Madison Road.

### **Dust Suppression and Control**

27. Dust abatement shall be performed consistently and conscientiously to limit the impacts to the air quality of surrounding properties and the general air quality of Gallatin County. To comply with the above, the operator may be required to use tackifiers on fines storage to minimize dust emanation from any stored materials. Applicant shall spray magnesium chloride (or other dust control measures as approved by the Gallatin County Road and Bridge Department) on interior roads so that dust emanation from interior roads is minimized.
28. All haul trucks leaving the facility shall be adequately covered or properly loaded to prevent unsafe amount of material from escaping onto public roads.

### **Noxious Weed Management**

29. Prior to issuance of a Land User Permit, the Applicant shall obtain an approved Weed Management and Revegetation Plan (“Plan”) from the Gallatin County Weed District (“Weed District”) for the proposed expansion. The approved Plan must address weed control operations for the duration of this CUP. Upon obtaining a Land Use Permit, the Applicant shall immediately begin implementation of the Plan.

Notwithstanding the above, all areas disturbed by construction, including areas on-site and areas off-site, including stockpiled topsoil, overburden berms and roads shall be controlled for noxious weeds and revegetated in accordance with the rules, regulations, standards and requirements of the Weed District.

All areas of stockpiled topsoil and overburden berms shall be adequately irrigated for the duration of this CUP to ensure seeding is successful and plant growth adequately controls erosion and weed growth.

Prior to closure of the mining operation the developer shall fulfill all requirements of the Plan and obtain a Memoranda of Understanding from the Weed District. If the Applicant has failed to complete all requirements of the Plan the Applicant shall enter into an Improvements Agreement with the Gallatin County Board of County Commissioners. The Improvements Agreement shall state that any revegetation and/or weed control required to be completed prior to closure of the operation shall be conducted during the next season where revegetation and weed control work can reasonably be accomplished.

### **General Operating Conditions**

30. All lighting used on site shall be directed in such a way as to be contained completely within the boundaries of the property and shall not emanate beyond the property lines. All lighting shall be hooded, screened or directed in a manner so that any light shall not be detrimental to the adjoining property owners or the neighborhood. Lights shall be extinguished at the close of business each day, with the exception of limited security lighting.
31. The operator shall enforce safety measures, including preventing overfilled trucks, covering loads, educating truck drivers, and monitoring driver performance.
32. Fuel containment measures shall be utilized as required by the application to MDEQ.
33. Prior to issuance of a Land Use Permit, the Applicant shall notify the Three Forks Rural Fire District regarding all access, parking, fire suppression, and emergency evacuation plans.
34. Applicant shall notify the Gallatin County Planning Department within 24 hours if any violation of these conditions of approval or any violation of any operating condition required by MDEQ is reported to MDEQ.
35. All conditions of approval imposed by MDEQ under the Opencut Mining Act shall be incorporated herein and constitute conditions of approval of this CUP and shall be enforceable as such by Gallatin County.
36. These conditions run with the land and shall be binding on the Applicant, landowner, and all successors in interest to the Applicant and landowner.



37. Prior to issuance of a Land Use Permit, the Applicant shall record with the Gallatin County Clerk and Recorder a copy of the signed and attested Findings of Fact and Order including these conditions of approval.
38. Nothing in this condition shall prevent the Applicant from stripping and stockpiling topsoil, constructing the access road(s) or making improvements to Madison Road prior to obtaining a valid Land Use Permit.
39. Applicant shall obtain a Land Use Permit within one year of approval of this CUP. A single one-year extension may be granted. Failure to obtain a Land Use Permit within this time frame shall result in the approval of this CUP being voided.

EXHIBITS:

- A. Gallatin County Water Resource Survey, T2N, R2E
- B. Gallatin County Traffic Impact Study Requirements
- C. Gallatin County Road & Bridge Department, July 8, 2009
- D. AASHTO – Geometric Design (Passenger and WB-67 vehicles)
- E. Montana Department of Transportation, July 13, 2009
- F. Montana Rail Link, July 15, 2009

CC: Gallatin County Attorney  
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